

ABSTRACT

It is an object of the invention to provide a droplet ejection apparatus that can carry out appropriate recovery processing easily and surely in the recovery processing for droplet ejection heads when the apparatus is powered on. The droplet ejection apparatus of the invention has a driving circuit and a plurality of droplet ejection heads. Each of the droplet ejection heads includes a cavity filled with a liquid, a nozzle communicated with the cavity, an actuator driven by the driving circuit, and a diaphragm displaced by the actuator, and ejects the liquid within the cavity through the nozzle in the form of droplets by driving the actuator with the driving circuit. The droplet ejection apparatus further includes: ejection failure detecting and recovery processing determining means (10) which detects a residual vibration of the diaphragm at least when the apparatus is powered on, and then detects an ejection failure of the droplet ejection heads on the basis of a vibration pattern of the detected residual vibration of the diaphragm and determines recovery processing for eliminating the ejection failure; and recovery means 24 for carrying out the recovery processing determined by the ejection failure detecting and recovery processing determining means.